In the claims:

Please amend the claims in this application as indicated below.

1. (Previously presented) A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets;

(b) a first transformer having,

1) a first core extending through said layers of dielectric sheets, and

2) a first set of electrically conductive windings, at least one of said windings of said first set of electrically conductive windings contained between two adjoining layers of said dielectric sheets;

(c) a second transformer having,

1) a second core extending through said layers of dielectric sheets, and

2) a second set of electrically conductive windings, at least one of said windings of said second set of electrically conductive windings contained between two adjoining layers of said dielectric sheets; and

(d) at least one electrically conductive trace extending between said first set of electrically conductive windings and said second set of electrically conductive windings, said at least one electrically conductive trace contained between two adjoining layers of said dielectric sheets.

2. (Previously presented) The power processing device according to claim 1, further including a first shielding layer on a first exterior surface of said multilayer printed circuit board, said first shielding layer being disposed between a first winding of said first set of windings and a winding of said second set of windings.

3. (Previously presented) The power processing device according to claim 2, further including a second shielding layer disposed on a second exterior surface of said multilayer printed circuit board, said second shielding layer being disposed between a second winding of said first set of windings and said winding of said second set of windings.

4. (Original) The power processing device according to claim 1, wherein said first set of electrically conductive windings and the second set of electrically conductive windings are electrically encapsulated.

5. (Original) The power processing device according to claim 4, wherein said at least one electrically conductive trace is electrically encapsulated.

6. (Original) The power processing device according to claim 1,

(a) wherein said first set of electrically conductive windings include quiet windings, and

(b) wherein said first transformer further includes a secondary set of windings positioned to have electrical flow induced therein by said first core, said secondary set of windings positioned proximate to said quiet windings.

7. (Previously presented) The power processing device according to claim 1,

(a) wherein said first transformer further includes a secondary set of windings positioned to have electrical flow induced therein by said first core; and

(b) further including an open loop of electrically conductive material positioned to inject a current through parasitic capacitance in said secondary windings having a polarity opposite that of current in said first set of windings.

8. (Previously presented) The power processing device according to claim 1,

(a) wherein said first transformer further includes a secondary set of windings positioned to have electrical flow induced therein by said first core; and

(b) further including an open loop of electrically conductive material positioned proximate and on a second side of said secondary windings.

9. (Original) The power processing device according to claim 1,

(a) wherein said first transformer includes a secondary winding;

(b) wherein said second transformer includes a secondary winding;

(c) wherein the secondary winding of said first transformer and the secondary winding of said second transformer are electrically connected in parallel; and

(d) wherein the first set of electrically conductive windings and the second set of electrically conductive windings are electrically connected in series.

10. (Previously presented) A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets;

(b) a transformer having,

1) a core extending through said layers of dielectric sheets, and

2) a first set of electrically conductive windings, at least one of said windings of said first set of electrically conductive windings contained between two adjoining layers of said dielectric sheets; and

(c) a first shielding layer disposed on a first exterior surface of said multilayer printed circuit board, said first shielding layer being disposed adjacent to and on one side of a winding of said first set of windings.

11. (Previously presented) The power processing device according to claim 10, further including a second shielding layer disposed on a second exterior surface of said multilayer printed circuit board, said second shielding layer being disposed adjacent to and on the other side of said winding of said first set of windings.

12. (Original) The power processing device according to claim 11, further including an electrically conductive trace contained between two layers of said dielectric sheets, said conductive trace communicating with said first set of electrically conductive windings.

13. (Original) The power processing device according to claim 10, further including:

(a) a set of quiet windings contained within said first set of windings; and

(b) a secondary set of windings positioned to have electrical flow induced therein by said core, said secondary set of windings positioned proximate to said quiet windings.

14. (Previously presented) The power processing device according to claim 10, further including:

(a) a secondary set of windings positioned to have electrical flow induced therein by said core; and

(b) an open loop of electrically conductive material positioned to inject a current through parasitic capacitance in said secondary windings, said injected current having a polarity opposite that of current in said first set of windings.

15. (Previously presented) The power processing device according to claim 10, further including:

(a) a secondary set of windings positioned to have electrical flow induced therein by said core; and

(b) further including an open loop of electrically conductive material positioned proximate and on a second side of said secondary windings.

16. (Previously presented) A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets; and

(b) a transformer having,

1) a core extending through said layers of dielectric sheets, and

2) a first set of electrically conductive windings, at least one of said windings of said first set of electrically conductive windings contained between two adjoining layers of said dielectric sheets, and at least one of said windings positioned on an external surface of said multilayer printed circuit board.

17. (Previously presented) The power processing device according to claim 16, further including a first shielding layer disposed on an exterior surface of said multilayer printed circuit board.

18. (Previously presented) The power processing device according to claim 16, further including an electrically conductive trace contained between two layers of said dielectric sheets, said conductive trace communicating with said first set of electrically conductive windings.

19. (Previously presented) The power processing device according to claim 18, further including at least one component secured to an exterior surface of said multilayer printed circuit board at a location over said electrically conductive trade.

20. (Previously presented A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets;

(b) a transformer having,

1) a first core extending through said layers of dielectric sheets, and

2) a first set of electrically conductive windings, at least one of said windings of said first set of electrically conductive windings contained between two adjoining layers of said dielectric sheets;

(c) an output choke having,

1) a second core extending through said layers of dielectric sheets, and

2) a second set of electrically conductive windings, at least one of said windings of said second set of electrically conductive windings contained between two adjoining layers of said dielectric sheets; and

(d) at least one electrically conductive trace extending between said first set of electrically conductive windings and said second set of electrically conductive windings, said at least one electrically conductive trace totally contained between two adjoining layers of said dielectric sheets.

21. (Previously presented) The power processing device according to claim 20, further including an output choke having:

(a) a third core extending through said layers of dielectric sheets;

(b) a third set of electrically conductive windings, at least one of said windings of said third set of electrically conductive windings contained between two adjoining layers of said dielectric sheets; and

(c) at least one trace extending between said first set of electrically conductive windings and said third set of electrically conductive windings, said at least one trace totally contained between two adjoining layers of said dielectric sheets.

22. (Previously presented) A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets;

(b) a first magnetic element having,

1) a first core extending through said layers of dielectric sheets, and

2) a first set of electrically conductive windings, at least one of said windings of said first set of electrically conductive windings contained between two adjoining layers of said dielectric sheets;

(c) a second magnetic element having,

1) a second core extending through said layers of dielectric sheets, and

2) a second set of electrically conductive windings, at least one of said windings of said second set of electrically conductive windings contained between two adjoining layers of said dielectric sheets; and

(d) at least one electrically conductive trace extending between said first set of electrically conductive windings and said second set of electrically conductive windings, said at least one electrically conductive trace totally contained between two adjoining layers of said dielectric sheets.

23. (Previously presented) The power processing device according to claim 20, further including a third magnetic element having:

(a) a third core extending through said layers of dielectric sheets;

(b) as third set of electrically conductive windings, at least one of said windings of said third set of electrically conductive windings contained between two adjoining layers of said dielectric sheets; and

(c) at least one trace extending between said first set of electrically conductive windings and said third set of electrically conductive windings, said at least one trace totally contained between two adjoining layers of said dielectric sheets.

24. (Previously presented) The power processing device according to claim 22, further including an active element secured to said multilayered printed circuit board and connected to the first set of electrically conductive windings.

25. (Previously presented) The power processing device according to claim 24, further including:

(a) a heat sink connected to one face of said multilayered printed circuit board opposing said active element; and

(b) a thermal via thermally connecting said active element and the heat sink.

26. (Previously presented) The power processing device according to claim 22, further including:

(a) a base plate having an active element thereon; and

(b) a lead communicating between the active element on said base plate and said first set of electrically conductive windings.

27. (Previously presented) The power processing device according to claim 26, wherein said electrically conductive trace in communication with said lead is totally contained between two adjoining layers of said dielectric sheets.

28. (Previously presented) A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets;

(b) a magnetic element having,

1) a core extending through said layers of dielectric sheets, and

2) a set of electrically conductive windings, at least one of said windings of said set of electrically conductive windings contained between two adjoining layers of said dielectric sheets;

(c) at least one electrically conductive trace, each electrically conductive trace communicating with one of said set of electrically conductive windings and totally contained between two adjoining layers of said dielectric sheets.

29. (Cancelled)

30. (Previously presented) A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets; and

(b) a transformer having,

1) a core extending through said layers of dielectric sheets, and

2) a first set of electrically conductive windings, at least one of said windings of said first set of electrically conductive windings contained between two adjoining layers of said dielectric sheets, and at least one of said windings positioned on an external surface of said multilayer printed circuit board; and

a first shielding layer disposed on an exterior surface of said multilayer printed circuit board.

31. (Cancelled)

32. (Cancelled)

33. (New) A power processing device comprising:

(a) a multilayer printed circuit board having multiple layers of dielectric sheets;

(b) at least one magnetic element;

(c) each magnetic element having a core extending through the layers of dielectric sheets, and

(d) each magnetic element having a set of electrically conductive windings contained between two adjoining layers of the dielectric sheets;

the board having first and second outer faces, each having an available surface of area A,

at least one of the first and second outer faces having electrical components secured thereon on the available surface,

the conductive windings contained between the two adjoining layers of the dielectric sheets defining one or more footprints with an area equal to at least 20% or more of the area A, and

at least one of electrical components secured to an outer surface being secured at a location that is directly over or under the winding footprint.

34. (New) The power processing device according to claim 33, wherein the one or more footprints of the conductive windings has an area of 25% or more of the area A.

35. (New) The power processing device according to claim 33, wherein the at least one of the electrical components is an active element.

36. (New) The power processing device according to claim 33, wherein multiple electrical components are secured on an outer surface of the circuit board directly above or under the winding footprint.

37. (New) The power processing device according to claim 33, wherein multiple magnetic elements include multiple cores extending through the layers of dielectric sheets, and having multiple sets of electrically conductive windings contained between adjoining layers of the dielectric sheets, and the sets of electrically conductive windings having footprints totaling at least 20% of A in area.

38. (New) The power processing device according to claim 37, wherein the at least one electrical component secured to an outer surface is a surface mounted component and has connectors electrically connected to the winding over or under the footprint of which the component is secured.

39. (New) The power processing device according to claim 38, wherein the connectors are connected to the winding by conductive vias extending through one of more layers of the board between the connectors and winding connection points over or under the connectors, whereby conductor impedance is minimized by the resultant short, direct connections.

40. (New) The power processing device according to claim 33, wherein the at least one magnetic element comprises a plurality of magnetic elements having cores extending through the layers of dielectric sheets, the cores reducing the area available on surfaces of the board by in excess of 20% of the total area within the board perimeter.

41. (New) The power processing device according to claim 33, wherein the device further comprises power components located on one surface of the board and connect by low thermal impedance paths to connections for an external heatsink on the remaining surface of the board.

42. (New) The power processing device according to claim 41, wherein the low thermal impedance paths are vias.

43. (New) The power processing device according to claim 41, wherein the low thermal impedance paths are large parallel pads.